

AMENDMENTS TO THE CLAIMS

1. **(Original)** An isolated population of CD4⁺ T-cells wherein the population is selected from:

CMRF-35⁺⁺ CD45RO⁺;
CMRF-35⁺ CD45RO⁺;
CMRF-35⁻ CD45RO⁺;
CMRF-35⁺ CD45RO⁻; and
CMRF-35⁻ CD45RO⁻ T-cells.

2. **(Original)** The isolated population of CD4⁺ T-cells of Claim 1 wherein the cells are from a mammalian subject.

3. **(Original)** The isolated population of CD4⁺ T-cells of Claim 2 wherein the mammal is a human.

4. **(Original)** The isolated population of CD4⁺ T-cells of Claim 2 wherein the cells are CMRF-35⁺⁺ CD45RO⁺ cells.

5. **(Original)** The isolated population of CD4⁺ T-cells of Claim 2 wherein the cells are CMRF-35⁺ CD45RO⁺ cells.

6. **(Original)** The isolated population of CD4⁺ T-cells of Claim 2 wherein the cells are CMRF-35⁻ CD45RO⁺ cells.

7. **(Original)** The isolated population of CD4⁺ T-cells of Claim 2 wherein the cells are CMRF-35⁺ CD45RO⁻ cells.

8. **(Original)** The isolated population of CD4⁺ T-cells of claim 2 wherein the cells are CMRF-35⁻ CD45RO⁻ cells.

9. **(Currently amended)** The isolated population of CD4⁺ T-cells of Claim 1 ~~or 2 or 3~~ wherein the cells are derived from a subject with an inflammatory condition.

10. **(Original)** The isolated population of CD4⁺ T-cells of Claim 9 wherein the inflammatory condition is psoriasis.

11. **(Currently amended)** The isolated population of CD4⁺ T-cells of Claim 1 ~~or 2 or 3~~ wherein the cells are derived from a subject with diabetes.

12. **(Currently amended)** The isolated population of CD4⁺ T-cells of Claim 1 ~~or 2 or 3~~ wherein the cells are derived from a subject with cancer.

13. **(Currently amended)** The isolated population of CD4⁺ T-cells of Claim 1 or 2 or 3 wherein the cells are derived from a subject with arthritis.

14. **(Currently amended)** The isolated population of CD4⁺ T-cells of Claim 1 or 2 or 3 wherein the cells are derived from a subject with an autoimmune disease.

15. **(Currently amended)** The isolated population of CD4⁺ T-cells of Claim 1 or 2 or 3 wherein the cells are derived from a subject with graft versus host disease.

16. **(Original)** An isolated CD4⁺ T-cell wherein the cell is CMRF-35⁺⁺ CD45RO⁺.

17. **(Original)** An isolated CD4⁺ T-cell wherein the cell is CMRF-35⁺ CD45RO⁺.

18. **(Original)** An isolated CD4⁺ T-cell wherein the cell is CMRF-35⁻ CD45RO⁺.

19. **(Original)** An isolated CD4⁺ T-cell wherein the cell is CMRF-35⁺ CD45RO⁻.

20. **(Original)** An isolated CD4⁺ T-cell wherein the cell is CMRF-35⁻ CD45RO⁻.

21. **(Original)** A method for assessing the immunological potential of a subject said method comprising obtaining a sample from said subject comprising T-cells and subjecting the sample to cell surface discrimination means to determine the presence, absence or level of CD4⁺ T-cells selected from the list consisting of:

CMRF-35⁺⁺ CD45RO⁺;

CMRF-35⁺ CD45RO⁺;

CMRF-35⁻ CD45RO⁺;

CMRF-35⁺ CD45RO⁻; and

CMRF-35⁻ CD45RO⁻ T-cells.

22. **(Original)** The method of Claim 21 wherein the subject is a mammal.

23. **(Original)** The method of Claim 22 wherein the mammal is a human.

24. **(Original)** The method of Claim 23 wherein the subject is depleted of or has an increased number of CMRF-35⁺⁺ CD45RO⁺ T-cells.

25. **(Original)** The method of Claim 23 wherein the subject is depleted of or has an increased number of CMRF-35⁺ CD45RO⁺ T-cells.

26. **(Original)** The method of Claim 23 wherein the subject is depleted of or has an increased number of CMRF-35⁻ CD45RO⁺ T-cells.

27. **(Original)** The method of Claim 23 wherein the subject is depleted of or has an increased number of CMRF-35⁺ CD45RO⁻ T-cells.

28. **(Original)** The method of Claim 23 wherein the subject is depleted of or has an increased number of CMRF-35⁺ CD45RO⁺ T-cells.

29. **(Original)** The method of Claim 23 wherein the subject has an autoimmune disease.

30. **(Original)** The method of Claim 29 wherein the autoimmune disease is diabetes.

31. **(Original)** The method of Claim 23 wherein the subject has an inflammatory condition.

32. **(Original)** The method of Claim 31 wherein the inflammatory condition is psoriasis.

33. **(Original)** The method of Claim 31 wherein the inflammatory condition is arthritis.

34. **(Currently amended)** A computer program product ~~therefore~~, for assessing the presence or absence or level of a sub-population of CD4⁺ T-cells said product comprising:

(i) code that receives, as input values, the identity of a reporter molecule associated with a labeled antibody which recognizes one of a CMRF-35 epitope or CD45RO marker;

(ii) code that compares said input values with reference values to determine the level of CMRF-35 epitope or CD45RO; and

(iii) a computer readable medium that stores the codes.

35. **(Original)** A computer for assessing the presence or absence or level of a sub-population of CD4⁺ T-cells, said computer comprises:

(i) a machine-readable data storage medium comprising a data storage material encoded with machine-readable data, wherein said machine-readable data comprise input values which identify a reporter molecule associated with a labeled antibody which recognizes one of a CMRF-35 antibody or CD45RO marker;

(ii) a working memory for storing instructions for processing said machine-readable data;

(iii) a central-processing unit coupled to said working memory and to said machine readable data storage medium, for processing said machine readable data to

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compare said values to provide an assessment of the identity or level of CMRF-35 epitope or CD45RO; and

(iv) an output hardware coupled to said central processing unit, for receiving the results of the comparison.

36. **(Currently amended)** The isolated population of CD4⁺ T cells of ~~any one of~~ claims 1-4 and 9-16, wherein said CD4⁺ T-cells are CMRF-35⁺⁺ CD45RO⁺ CXCR3⁺ T cells.

37. **(Currently amended)** The method of ~~any one of~~ claims 21-24 and 29-35, wherein said CD4⁺ T cells are CMRF-35⁺⁺ CD45RO⁺ CXCR3⁺ T cells.